To: Brown, Jamesr[brown.jamesr@epa.gov]; Garcia, David[Garcia.David@epa.gov]; McCasland,

Mark[McCasland.Mark@epa.gov]; McCoy, Melinda[McCoy.Melinda@epa.gov]; Kirkland,

Robert[kirkland.robert@epa.gov]

Cc: Foster, Althea[Foster.Althea@epa.gov]; Crossland, Ronnie[Crossland.Ronnie@epa.gov];

Webster, Susan[webster.susan@epa.gov]

From: Restivo, Angela

Sent: Fri 8/7/2015 11:23:23 PM **Subject:** FW: Water quality parameters

Water quality 080715.xlsx

This information was provided by the toxicologist in R8.

From: McKean, Deborah

Sent: Friday, August 07, 2015 5:45 PM

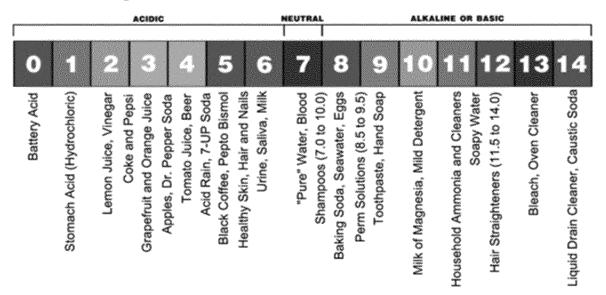
To: Turner, Philip; Rauscher, Jon **Subject:** Water quality parameters

Here is the data we have on water quality parameters. There are some data from Farmington. It looks like the pre-incident data that you were hoping for.

Right now, on these data, we are commenting on pH. Below is the current version of the message. ATSDR also made a statement about pH and we are being consistent with that message. I should get the summarized chem data in just a bit.

pH (a measure of acidity) was measured at a number of locations along Cement Creek and the Animas River to Durango and beyond to Farmington, New Mexico. Except for locations within Cement Creek, generally, pH levels were measured before the arrival of the contaminant plumb and found to range between 6.5 and 7.6. When the contaminated water from the mine rupture passed a sampling location, the pH lowered (indicating more acid) to approximately 4.8 (below Silverton). A pH of 4.5 is consistent with the pH of a liquid like black coffee. Later, however, in locations down river, the pH began to return to pre-incident levels. Water acidity levels in the Animas above Cement Creek have been consistent over the past two days at approximately 6.4 to 6.8. The pH of saliva is roughly 6 and the pH of pure water is 7. The acidity level in Cement Creek has remained low at 3.74 since the mine rupture. Tomato juice and apples also have a pH of approximately 3.74.

pH of Common Substances



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